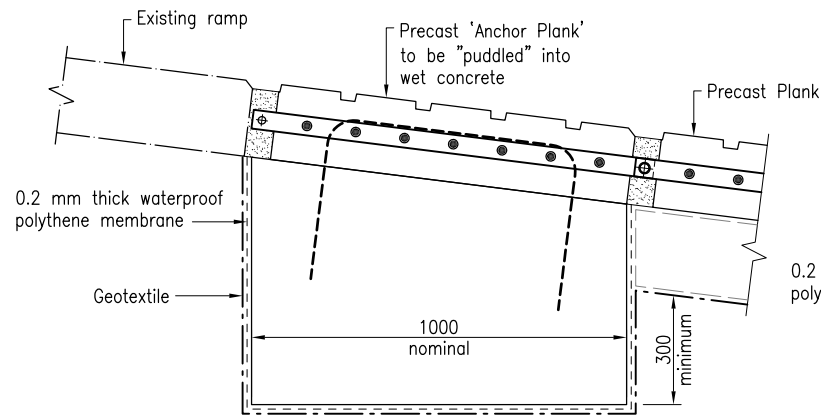
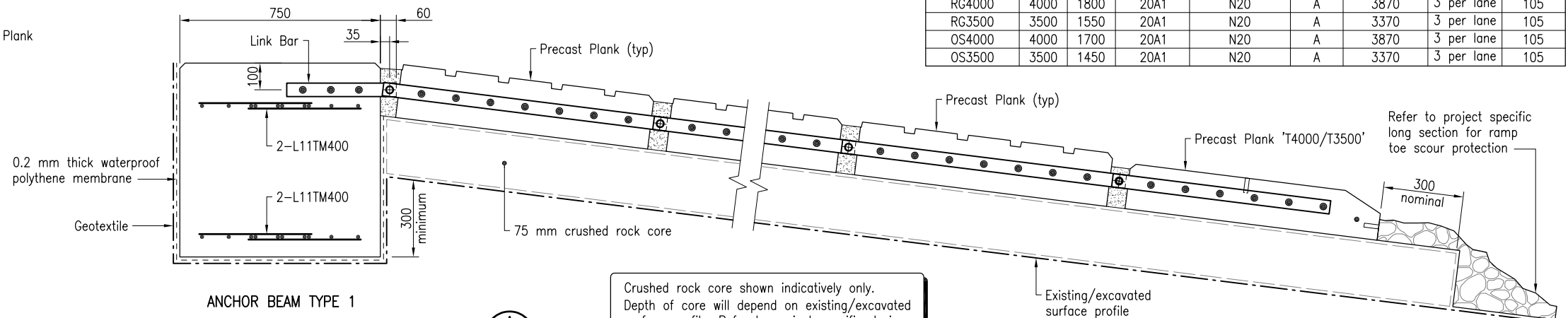


ANCHOR BEAM TYPE 1 SCHEDULE

PLANK TYPE	DIMENSIONS		REINFORCEMENT					
	'X'	'Y'	Bar Mark	Grade & Size	Shape	Length (A)	Quantity	Centres
RG4000	4000	1800	20A1	N20	A	3870	3 per lane	105
RG3500	3500	1550	20A1	N20	A	3370	3 per lane	105
OS4000	4000	1700	20A1	N20	A	3870	3 per lane	105
OS3500	3500	1450	20A1	N20	A	3370	3 per lane	105



ANCHOR BEAM TYPE 2

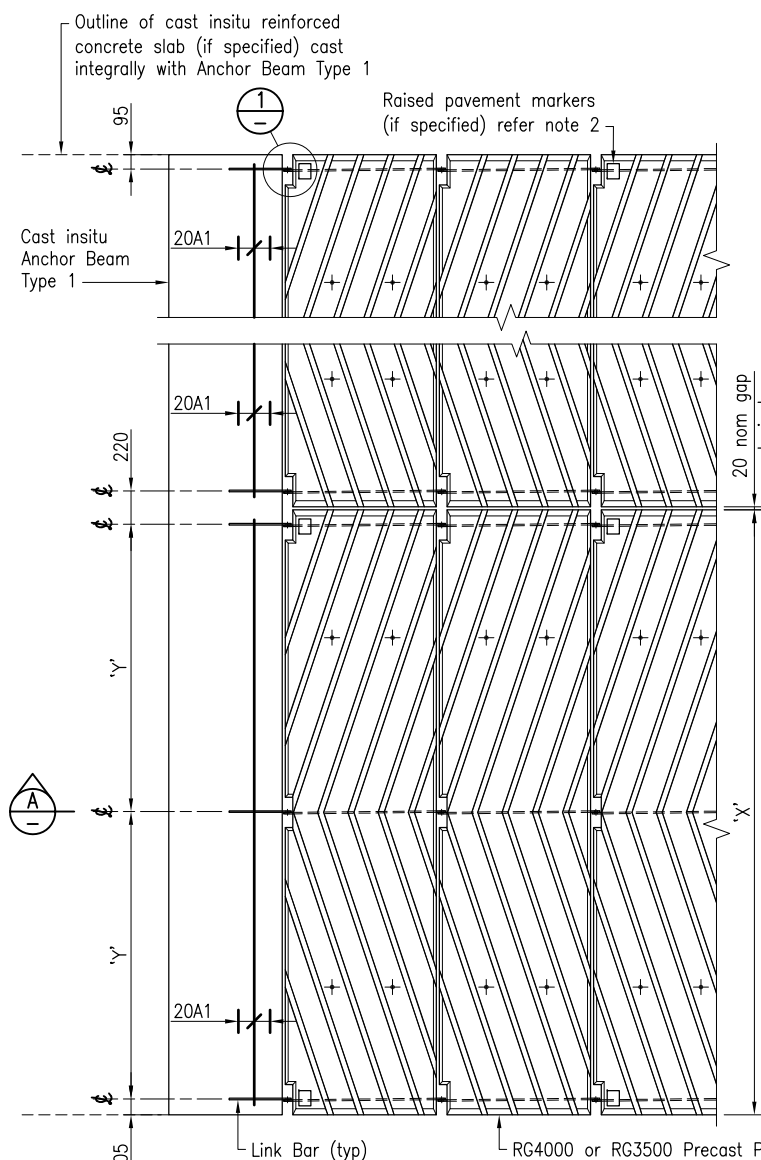


ANCHOR BEAM TYPE 1

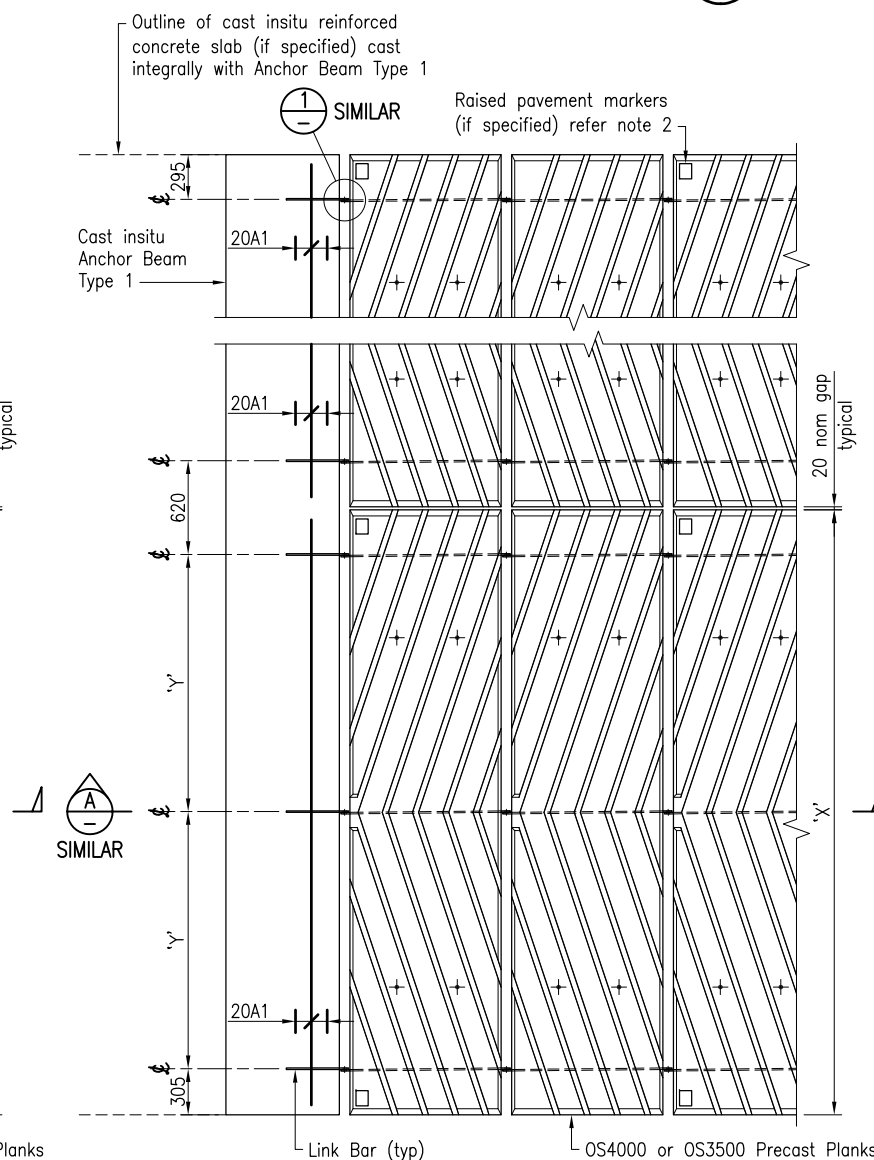
SECTION A

NOTES:

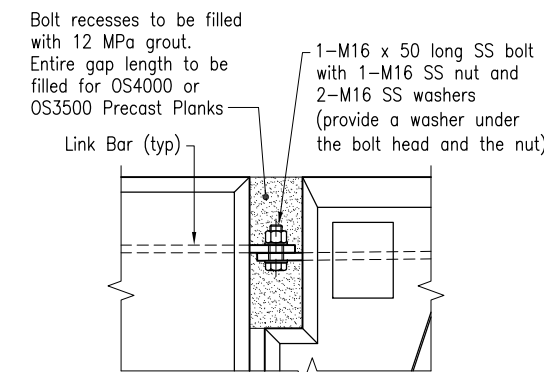
- CONSTRUCTION OF BOAT RAMP shall be in accordance with MRTS300.
- RETROREFLECTIVE RAISED PAVEMENT MARKERS (RRPM) shall be applied where shown (if required) on the project specific design drawings. Pavement markers shall be yellow Type A1 bidirectional markers in accordance with AS 1906.3. Size to be 80 x 100 or 100 x 100. Pavement markers shall be fully supported on precast planks without overhanging the grooves. The reflective faces shall be aligned longitudinally so they face the water and the ramp approach. Contact surfaces are to be evenly ground back 1-2 mm, cleaned to remove all loose material and other contaminants, and thoroughly dried prior to adhesion. A two part epoxy adhesive for bonding to concrete shall be spread evenly over the entire base of the marker with sufficient thickness to fill voids, and shall flow out the sides to demonstrate full adhesion. Excess adhesive shall be removed without contaminating the reflective faces.
- CONCRETE to be in accordance with MRTS70. Concrete to be S50/20, exposure classification C. Concrete to be cured in accordance with MRTS70. All exposed concrete edges shall have 20 x 20 chamfers unless shown otherwise.
- REINFORCING STEEL to be read in conjunction with Standard Drawings 1043 and 1044. Reinforcing steel to be in accordance with AS/NZS 4671 and MRTS71. Deformed bars Grade D500N. Mesh Grade D500L. Minimum cover to reinforcing steel shall be 65 unless shown otherwise. All carbon reinforcing steel to be Australian Certification Authority for Reinforcing Steel (ACRS) certified. All carbon steel reinforcing bars, reinforcing mesh and tielines shall be hot dip galvanised to AS/NZS 4680.
- STAINLESS STEEL to be in accordance with ASTM A276. Stainless Steel flat bar Grade 316. All work shall be neatly finished with sharp edges removed.
- SURFACE FINISH: Trafficable surface of Anchor Beam Type 1 to have a medium broom finish at 90° to the boat ramp control line.
- STAINLESS STEEL BOLTS to be Grade A4/316, nuts to be Grade A4/316 A4-70 and washers to be Grade 316, and shall conform to ISO 3506. All stainless steel bolts, nuts and washers shall be either electro polished or passivated in accordance with ASTM 380. A nickel based anti-sieze lubricant shall be applied to threads prior to assembly. Bolted joints to be wrapped with polyethylene tape before grouting.
- For RG4000 and RG3500 Precast Plank details refer Standard Drawing 4000. For OS4000 and OS3500 Precast Plank details refer Standard Drawing 4001. For T4000 and T3500 Precast Plank details refer Standard Drawing 4002. For geotextile, geogrid, 75 mm crushed rock and earthworks details refer Standard Drawing 4021.
- DIMENSIONS are in millimetres unless shown otherwise.



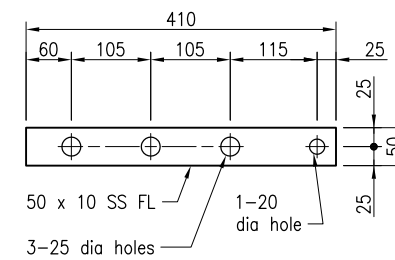
**LINK BAR SETOUT FOR RG4000 and RG3500 PRECAST PLANKS
PLAN VIEW**



**LINK BAR SETOUT FOR OS4000 and OS3500 PRECAST PLANKS
PLAN VIEW**



DETAIL 1



**(No OFF = 3 per lane)
LINK BAR DETAIL**

ASSOCIATED DEPARTMENTAL DOCUMENTS:

Standard Drawings Specifications

REFERENCED DOCUMENTS:

Departmental Standard Drawings:
1043 Reinforcing Steel - Standard Bar Shapes, Typical Details and Notes
1044 Reinforcing Steel - Lap Lengths

Departmental Standard Drawings continued:

4000 Precast Plank for Boat Ramp - Types RG4000 and RG3500
4001 Precast Plank for Boat Ramp - Types OS4000 and OS3500
4002 Precast Plank for Boat Ramp - Types T4000 and T3500
4021 Boat Ramp Construction - Earthworks and Crushed Rock Core Details
Departmental Specifications:
MRTS70 Concrete
MRTS71 Reinforcing Steel
MRTS300 Boat Ramps

Australian and International Standards:

AS 1906.3 Retroreflective Materials and Devices for Road Traffic Control Purposes - Raised Pavement Markers
AS/NZS 4671 Steel Reinforcing Materials
AS/NZS 4680 Hot-dip Galvanized (Zinc) Coatings on Fabricated Ferrous Articles
ASTM A276 Standard Specification for Stainless Steel Bars and Shapes
ASTM 380 Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems
ISO 3506 Mechanical Properties of Corrosion-resistant Stainless Steel Fasteners

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BOAT RAMP		
BOAT RAMP CONSTRUCTION - PRECAST PLANK INSTALLATION AND ANCHOR BEAM - TYPES 1 AND 2		Standard Drawing No 4020 Date 07/16
A3	Not to Scale	